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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,710	12/08/2003	John Strassner	CNTW-022/01US	2108
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COOLEY GODWARD KRONISH LLP			ANWARI, MACEEH	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/730,710	Applicant(s) STRASSNER ET AL.	
	Examiner MACEEH ANWARI	Art Unit 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1- 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/06/2005, 12/08/2003, 1/23/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is the initial Office action based on the 10/730710 application filed on 12/08/2003. **Claims 1- 32**, as originally filled, are currently pending and have been considered below.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1- 14 are rejected under 35 U.S.C. 101 because The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either “functional descriptive material” or “non-functional descriptive material.” Both types of “descriptive material” are non-statutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming non-functional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1- 31** are rejected under 35 U.S.C. 102(e) as being anticipated by **Stevens et al.** (hereinafter **Stevens**) U.S. Patent No.: 6,539,425 B1.

Claim 1: An apparatus for provisioning a service using a network comprising: an information model configured to represent at least one function of a network resource to provision said service, said information model configured further to represent a relationship between said service and said at least one function, and to represent a subset of policies to govern operations of said network for provisioning said service (Figures 1-7 and Abstract & Col. 2 lines 1- 14 & line 62- Col. 3 line 6; data model,

information model and services and policy information); and a processor configured to use a subset of business rules to constrain the implementation of said at least one function of said network resource (Figures 1- 7 and Abstract & Col. 3 lines 54- 61; processor, network resources and distributed resources).

Claim 2: further comprising a common translation layer to translate a first level of abstraction for said network resource to a second level of abstraction (Figures 1- 7 and Abstract & Col. 6 lines 56- 67; message interpreters).

Claim 3: further comprising a common translation layer to translate a first level of abstraction for said network resource to any number of levels of abstraction, wherein said first level includes one or more levels of abstraction (Figures 1- 7 and Abstract; schema adaptation layer and message interpreters).

Claim 4: wherein said subset includes at least one business rule for constraining configuration of said network resource (Figures 1- 7 and Abstract & Col. 1 lines 33- 45 & Col. 6 lines 56- 67; Directory Enabled Networks, industry standards, QoS, and network priorities).

Claim 5: wherein said subset includes at least one business rule for constraining deployment of said network resource (Figures 1- 7 and Abstract & Col. 1 lines 33- 45 & Col. 6 lines 56- 67; Directory Enabled Networks, industry standards, QoS, and network priorities).

Claim 6: wherein said information model comprises: a managed entity

data structure for representing said network resource (Figures 1- 7 and Abstract & Col. 5 lines 3- 13; device data structures); an upper layer to provide a first level of abstraction for a first portion of said managed entity data structure (Figures 1- 7 and Abstract; administrators and clients); and a lower layer to provide a second level of abstraction for a second portion of said managed entity data structure (Figures 1- 7 and Abstract ; administrators and clients).

Claim 7: wherein said first level of abstraction is associated with said subset of business rules and said second level of abstraction is associated with configuration data (Figures 1- 7 and Abstract; administrators, clients and configuration parameters).

Claim 8: wherein said information model comprises: a managed entity data structure for representing said network resource (Figures 1- 7 and Abstract; data models, state/policy information and configuration information); a first subset of levels of abstraction associated with a first portion of said managed entity data structure (Figures 1- 7 and Abstract Col. 2 lines 17- 37; network manager, high level language and Java); and a second subset of levels of abstraction associated with a second portion of said managed entity data structure (Figures 1- 7 and Abstract Col. 2 lines 17- 37; network manager, high level language and Java).

Claim 9: wherein said first subset of levels of abstraction is associated with said subset of business rules and said second subset of levels of abstraction is associated with configuration data (Figures 1- 7 and

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Abstract Col. 2 lines 17- 37; network manager, high level language and Java).

Claim 10: wherein said configuration data includes at least a command to perform said at least one function of said network resource (Figures 1- 7 and Abstract & Col. 6 lines 56- 67; message interpreters, and interpreted message commands).

Claim 11: wherein said information model further comprises another managed entity data structure for representing another network resource (Figures 1- 7 and Abstract; data models, state/policy information and configuration information).

Claim 12: wherein said managed entity data structure and said another managed entity data structure include a first role and a second role, respectively (Figures 1- 7 and Abstract Col. 2 lines 17- 37; network manager, network administrators and clients).

Claim 13: wherein said another network resource is a user authorized to implement said network resource (Figures 1- 7 and Abstract Col. 2 lines 17- 37; network manager, network administrators and clients).

Claim 14: wherein said information model is a directory enabled network-next generation ("DEN-ng") information model (Figures 1- 7 and Abstract Col. 2 lines 62- 67; Directory Enabled Networks).

Claims 15- 31 list all the same elements as in **claims 1-14** and are therefore rejected using the same rationale as in **claims 1- 14**.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claim 32** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Stevens** as applied to **claims 1- 31** above, and further in view of **Niazi et al.** (hereinafter **Niazi**) U.S. Publication No.: 2002/0013791 A1.

Stevens discloses the invention as described above, however Stevens does not explicitly disclose wherein said knowledge information is represented by an XML Schema Definition ("XSD") data model.

However, the general concept of using XML Schema Definition ("XSD") data model to represent knowledge information is well known in the art as shown in **Niazi** (Par. 69 & 71).

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Accordingly it would have been obvious to one of ordinary skill in the art to combine the teachings of **Stevens** with that of **Niazi** to allow for a more efficient manner for processing data files.

Examiner Note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching of all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MACEEH ANWARI whose telephone number is (571)272-7591. The examiner can normally be reached on Monday-Friday 7:30-5:00 PM ES.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M. A.

/William C. Vaughn, Jr./
Supervisory Patent Examiner, Art Unit 2144